IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BOARD OF PATENT APPEALS AND INTERFERENCES

In re patent application of:
  Andra et al.

Serial No.: 10/709,793

Filed: May 28, 2004

Group Art Unit: 2168

Examiner: Mahesh H. Dwivedi

Atty. Docket No.: BUR920040087US1

For: A SYSTEM AND METHOD FOR SPEEDING XML CONSTRUCTION FOR A BUSINESS TRANSACTION USING PREBUILT XML WITH STATIC AND DYNAMIC SECTIONS

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

APPELLANTS' REPLY BRIEF TO EXAMINER'S ANSWER

Sirs:

     Appellants respectfully replies to the Examiner's Answer, mailed July 28, 2008, in the following Brief.

Serial No. 10/709,793

I.   STATUS OF CLAIMS

Claims 1-6, 8-16, and 18-24 stand rejected under 35 U.S.C. §103(a) as unpatentable over U.S. Patent Application Publication No. 2002/0178103 to Dan et al., hereinafter, Dan, in view of U.S. Patent Application Publication No. 2003/0167446 to Thomas, hereinafter, Thomas, and further in view of U.S. Patent Application Publication No. 2002/0042757 to Albazz et al., hereinafter, Albazz.

Appellants respectfully traverse these rejections based on the following discussion.

II.   STATEMENT OF AMENDMENTS

Appellants gratefully acknowledge the Examiner's communication, noting that an Amendment After Final was submitted on February 28, 2008.

III.   RESPONSE TO ANSWER'S ARGUMENTS

A.   The Dan Disclosure

[0033] The TPA template or party profile may be included as part of the information advertised by the service provider in step 60 of FIG. 2. The profile serves as the starting point of a negotiation by providing an initial version of a contract document. The profile may include information such as: products and services provided, specific business processes that the service provider can perform, security requirements, and technology information such as which message-exchange protocols are supported by the service provider. The service provider's profile may be embodied in a variety of different forms. Several examples of the service provider's profile are described herein, although alternative profile forms will be apparent to those of ordinary skill in the art.

[0034] In one embodiment, the service provider's profile may describe the capabilities of one party. This profile may be expressed, for example, as an XML document whose contents may be incorporated into a contract. The information

contained in the profile may include not only the capabilities of a party but also may contain requirements of the interacting party in the form of a contract template. The contract template is provided to express a contract either between a pair of roles or between an actual party (whose profile is represented by the template) and a role. One example of a contract template is an almost-complete electronic contract document with a few fields left blank: these fields are to be filled in by the negotiating party. An enhanced template additionally specifies, in an associated document, the acceptable choices for the negotiable fields.

[0035] Fig. 4 is a schematic diagram that illustrates a party profile and a contract template. Party profile 1010 may contain, for example, party contact information 1011, a description of the service offered or needed 1012, one or more contract templates 1013, and allowable choices 1014. Allowable choices 1014 may cover, for example, business and/or technical considerations such as a list of supported transport protocols, a list of supported shipping or transport services (such as overnight shipping, airmail delivery, etc.), delivery times, and/or the optional use of a preexisting meta contract. Profile 1010 may include a contract template 1020 containing one or more nonnegotiable fields 1021, 1022 and one or more negotiable fields 1023, 1024. As mentioned above, negotiable field 1023 or 1024 may be treated as a blank that may be completed by the negotiating party or, alternatively, may specify capabilities or allowable choices that may be selected. The capabilities and/or allowable choices may be provided as searchable information by a public registry or repository.

[0046] If either of the parties chooses to abort 340 the negotiation at any time during negotiations, the outcome 350 is the termination of the entire negotiation process. When all the sub components of a contract have been agreed to by both sides, the negotiation is committed in step 360, and the negotiation continues to step 380 where the negotiation is complete and step 380 leads to the service contract or TPA.

B. **The Thomas Disclosure**

[0044] Once the user has finished entering modifications to the XML file and all of the modifications have been found to be either not significant or valid semantic changes, the temporary version of the XML file in the RAM 7 is written over the original file in the first storage region. Of course, the modified version of the XML file may be stored separately from the original version of the XML file instead of overwriting the original XML version.

C. **The Albazz Disclosure**

[0076] A product List Filter (PLF) is a representation of a seller's product list which replaces the completer list of all products available from a seller organization (as used herein the term "products" includes both products and services). This representation comprises product selection and/or exclusion criteria, based on a selection metaphor. The representation criteria are structured and stored in a way that ensures rebuilding the targeted product list from a master product catalog, or from multiple catalogs or other product information sources, any time the target product list is required. Depending upon the used PLF, a generated list could be static with the same products being produced at every run, or could be dynamic with new products being added or removed according to changes taking place at the seller organization. Fig. 5 illustrates an example of the creation and storage of a Product List Filter.

D. **Arguments**

Regarding the rejection of independent claims 1, 11, and 21, the Answer cites Dan for teaching "pre-building static structures of said XML transaction (Paragraphs 33-35)".

Dan discloses a contract template 1011, presumably analogous to a business transaction, containing one or more nonnegotiable fields 1021, 1022 and one or more

negotiable fields 1023, 1024. Dan also discloses that the profile serves as the starting point of a negotiation by providing an initial version of a contract document, i.e., the contract template, 1011. (Paragraph [0035]).

The present invention defines a "static structure" as "a pre-built XML structure with pre-filled values based on the associated transaction type and TPP [Trading Partner Profile]", (Specification, paragraph [0024], lines 13-15). Therefore, the pre-built XML "static structures" of the present invention are static, i.e., unchanging, and pre-filled with values based on the associated transaction type and trading partner profile. Hence, there are no negotiable fields, as described by Dan, in the invention's static structures, which are static and pre-filled.

In contrast, the contact template of Dan contains one or more negotiable fields 1023, 1024 that will be filled with future negotiations.

Therefore, Appellants respectfully submit that Dan does not disclose, teach or suggest the present invention's feature of "pre-building static structures of said XML transaction, wherein said static structures comprise a pre-built XML data structure with pre-filled values based on a transaction type of said XML transaction and a predetermined trading partner profile", as recited in independent claims 1, 11, and 21.

Regarding the rejection of independent claims 1, 11, and 21, the Answer cites Thomas for teaching "wherein said final XML structure is validated by comparing said final XML structure against said copy of said original pre-defined data type definition format for said XML transaction" as "Once the user has finished entering modifications to the XML file and all of the modifications have been found to be either not significant or valid semantic changes, the temporary version of the XML file in the RAM 7 is written over the original XML file in the first storage region 4" (Paragraph 44 [of Thomas]).

In the present invention, a business partner agrees to send a business transaction in a mutually agreed upon XML format (proprietary or standards based), call a Data Type Definition (DTD) format. Next, a Trading Partner Profile (TPP) is created in a database

that holds information about the partner, the communication protocol used, the enabled transaction, format of transaction, and XML format version. Then, a copy of the DTD is created. Thereafter, <u>static elements of the XML are filled with pre-determined values based on the TPP</u> and are stored using an editor. <u>The static sections are linked to the TPP and transaction</u>, and are stored in the database. <u>At execution time</u>, based on the TPP and transaction combination, <u>the corresponding static sections</u> are taken and the application specific dynamic sections are built <u>to construct the final XML</u>. Execution time is defined as the transaction runtime (that is, sending the transaction to the trading partner). <u>The constructed XML is then run against (compared against) the DTD to validate the structure</u>.

In contrast, Thomas discloses that the temporary copy of the contents of the XML file is displayed 29 by means of the output interface 10 so that <u>a user is able to input modifications to the XML file</u> via the input interface 9. Each of the changes entered by the user is compared 30 to the temporary copy of the XML file and checked 31 to establish whether the modification is significant, i.e., a semantic change. … Where the modification is identified as a semantic change, the processor checks 34 whether a valid difference representation of the change can be generated using the delta DTD [i.e., Document Type Definition].

Thomas further discloses a method of recording and validating changes to a markup language, wherein semantic <u>changes to the original XML file necessarily require slight modifications</u> to enable a delta file to represent changes to the original markup language file. These slight modifications may entail amending element type declarations and processing these element type declarations to the lowest level of each content particle.

However, <u>the DTD of the present invention is originally fixed and its DTD copied, and does not require such slight modifications or amending of element type declarations as does Thomas</u> because the final XML structure of the present invention comprises pre-filled static structures, to which no modifications or amendments of the DTD are made, and dynamic structures that comprise empty tags, to which no modifications or amendments of

the DTD are made, so that the final or constructed XML structure may be compared to or validated against the original pre-defined data type definition.

Therefore, Appellants respectfully submit that Thomas does not disclose, teach or suggest the present invention's feature of "wherein said final XML structure is validated by comparing said final XML structure against said copy of said original pre-defined data type definition format for said XML transaction", as recited in independent claims 1, 11, and 21.

Furthermore, for at least the reasons outlined immediately above, Appellants respectfully submit that Thomas does not cure the deficiencies of Dan, because Thomas does not disclose, teach or suggest the present invention's feature of "pre-building static structures of said XML transaction, wherein said static structures comprise a pre-built XML data structure with pre-filled values based on a transaction type of said XML transaction and a predetermined trading partner profile".

Instead, Thomas merely discloses a method of recording and validating changes to a markup language, wherein semantic changes to the original XML file necessarily require slight modifications to enable a delta file to represent changes to the original markup language file.

Regarding the rejection of independent claims 1, 11, and 21, the Answer cites Albazz for teaching "building a list of a sequence of said static and dynamic structures".

Appellants respectfully submit that Albazz merely discloses generating a list that could be static with the same products being produced at every run, or could be dynamic with new products being added or removed according to changes taking place at the seller organization.

In contrast, the present invention describes the feature of "building a list of a sequence of said static and dynamic structures", wherein both static and dynamic structures are previously defined, i.e., "pre-building static structures of said XML transaction, wherein said static structures comprise a pre-built XML data structure with pre-filled

values based on a transaction type of said XML transaction and a predetermined trading partner profile; classifying dynamic structures of said XML transaction with empty tags and single occurrence classifiers for repeating dynamic structures".

The static and dynamic product lists of Albazz do not disclose, teach or suggest the present invention's features of "wherein said static structures comprise a pre-built XML data structure with <u>pre-filled</u> values based on a transaction type of said XML transaction and a <u>predetermined</u> trading partner profile" or "dynamic structures of said XML transaction with empty tags and single occurrence classifiers for repeating dynamic structures". The static and dynamic product lists of <u>Albazz are not explicitly defined as XML data structures corresponding to a transaction</u>. A list is not a transaction.

Therefore, Appellants respectfully submit that Albazz does not disclose, teach or suggest the present invention's feature of "pre-building static structures of said XML transaction, wherein said static structures comprise a pre-built XML data structure with pre-filled values based on a transaction type of said XML transaction and a predetermined trading partner profile; classifying dynamic structures of said XML transaction with empty tags and single occurrence classifiers for repeating dynamic structures; building a list of a sequence of said static and dynamic structures", as recited in independent claims 1, 11, and 21.

Furthermore, for at least the reasons outlined immediately above with respect to Albazz and above with respect to Dan and Thomas, Appellants respectfully submit that Albazz does not cure the deficiencies of Dan and Thomas, because Albazz also does not disclose, teach or suggest the present invention's feature of "pre-building static structures of said XML transaction, wherein said static structures comprise a pre-built XML data structure with pre-filled values based on a transaction type of said XML transaction and a predetermined trading partner profile". Instead, Albazz merely discloses generating a list that could be static with the same products being produced at every run, or could be dynamic with new products being added or removed according to changes taking place at the seller organization.

Reply Brief

For at least the reasons outlined above, Appellants respectfully submit that Dan, Thomas, and Albazz, either individually or in combination, do not disclose, teach or suggest the present invention's features of "pre-building static structures of said XML transaction, wherein said static structures comprise a pre-built XML data structure with pre-filled values based on a transaction type of said XML transaction and a predetermined trading partner profile; classifying dynamic structures of said XML transaction with empty tags and single occurrence classifiers for repeating dynamic structures; building a list of a sequence of said static and dynamic structures", as recited in independent claims 1, 11, and 21. Accordingly, Dan, Thomas, and Albazz, either individually or in combination, fail to render obvious the subject matter of independent claims 1, 11, and 21, and dependent claims 2-6, 8-10, 12-20, and 21-24 under 35 U.S.C. §103(a).

In view of the foregoing, the Board is respectfully requested to reconsider and withdraw the rejection of independent claims 1, 11, and 21 and dependent claims 2-6, 8-10, 12-20, and 21-24 under 35 U.S.C. §103(a) as unpatentable over Dan, Thomas, and Albazz

VIII. CONCLUSION

In view of the foregoing, the Appellants respectfully submit that the collective cited prior art do not teach or suggest the features defined by independent claims 1, 11 and 21, and as such, claims 1, 11, and 21 are patentable over Dan, Thomas and Alabazz, either individually or in combination. Furthermore, as the independent claims are patentable over Dan, Thomas, and Albazz, so too are dependent claims 2-6, 8-10, 12-16, 18-20, and 22-24 patentable over Dan, Thomas and Albazz by virtue of their dependency from patentable independent claims 1, 11, and 21. Thus, Appellants respectfully request that the Board reconsider and withdraw the rejections of claims 1-6, 8-16, and 18-24 and pass these claims to issue.

Please charge any deficiencies and credit any overpayments to Attorney's Deposit Account Number 09-0456.

Respectfully submitted,

Date: <u>September 29, 2008</u>

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